

Eastern Aircraft Division (General Motors) FM-2 “Wildcat”

The Hickory Aviation Museum’s FM-2 Wildcat, BuNo 16278 is on loan from the National Naval Aviation Museum. Coordinated by Kregg Kirby.



Role	First Line Fighter
Manufacturer	Eastern Aircraft Division (GM)
Designer	Grumman Aircraft
First flight	02 September 1937 (F4F)
Primary users	United States Navy United States Marine Corps Royal Navy Royal Canadian Navy
Produced	1943-1945 (FM1/2)
Number built	5,837 of 7,825 Total Wildcats
Propulsion	1 Wright R-1820-65
Developed from	Grumman F4F Wildcat
Variants	Various

Built by the Eastern Aircraft Division of General Motors, the FM-2 Wildcat essentially is an improved version of the famous Grumman F4F-4. Recognized by its taller fin than the F4F, the FM-2 was also modified to include an improved power plant, increased ammunition capacity by reducing its armament from six .50-inch machine guns to four, and improved directional stability with a modified fin. It was nicknamed the “Wilder Wildcat”.

General characteristics

Crew: One

Length: 28 ft 11 in

Wingspan: 28 ft

Height: 11 ft 5 in

Wing area: 260 sq ft

Empty weight: 5,448 lb

Loaded weight: 8,271 lb

Powerplant: 1 × 1,350 hp. Wright R-1820-65

Performance

Maximum speed: 332 mph at 28,000 ft

Cruise speed: 164 mph

Range: 900 miles

Service ceiling: 34,700 ft

Rate of climb: 3,650 ft/min

Armament

Four .5-in. machine guns; two 250 lb. bombs or six 5-in. rockets

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Design and development

The famous Grumman F4F Wildcat was the first line fighter for the Navy and Marine Corps at the outbreak of World War II. The first operational models, the F4F-3 and 3A were followed quickly by the F4F-4, the latter's salient improvement the incorporation of folding wings which essentially permitted doubling the complement of fighters aboard existing aircraft carriers. In early 1942, however, the Navy pushed Grumman for development of a follow-on fighter, the F6F Hellcat. With Grumman lacking facilities to meet requirements for sufficient numbers of F4Fs while attempting to develop the newer F6F, the Navy turned to General Motors for help. The auto manufacturer quickly turned three idled auto plants in Tarrytown, New York, Trenton, New Jersey, and Baltimore, Maryland, into aircraft plants that would augment Grumman's production of both the TBF Avenger and the F4F Wildcat. The phenomenal transformation yielded a combined total by Grumman and Eastern Aircraft of more than 35,000 aircraft by war's end.

While the Wildcat was considered inferior in maneuverability to the vaunted Japanese A6M Zero, the more heavily armed, better protected F4F proved potent as U.S. Navy and Marine pilots learned to deal with the Zero's strong points and exploit its weaknesses. By war's end the F4F and FM kill ratio stood at a respectable 7 to 1. The designation FM-2 denotes an improved model of the F4F, incorporating an improved R-1820 power plant (some models included water injection for increased power for takeoff from small deck escort carriers), an enlarged fin and rudder to counter the increased torque, and four gun armament with increased ammunition capacity allowing the aircraft to carry 1,720 rounds of ammunition vs 1,440 in the F4F making it much more formidable opponent for the Japanese Zero.

Many FM-2s were used in the Atlantic, operating from escort carriers involved in convoy protection and antisubmarine operations. The letter "M" in the aircraft's designation is the company code for Eastern Aircraft Division of General Motors.

Operational history

U.S. Navy

This FM-2 (Bureau Number 16278) was accepted by the US Navy on January 12, 1944. Its first few months of service is unclear but it did appear in the South Pacific in October 1944 with Combat Aircraft Support Unit (Forward) – Twenty (CASU(F)-20) on the island of Roi-Namur supporting Marine Aircraft Group (MAG) 31 during the battle of Kwajalein. It then was moved to Majuro providing island defense for 4th Marine Air Wing and MAG-13. 16278 was sent back to San Diego for reconditioning and then on to NRAB Glenview and the Carrier Qualification Training Unit (CQTU). The aircraft crashed into Lake Michigan on June 26, 1945. It was recovered in the 1990's and restored at the National Museum of Naval Aviation in Pensacola, Florida.

[Grumman F4F Wildcat - Wikipedia](#)